

PROGRAM

Sunday Evening, 31 October 1999

Registration: 5:00 pm to 7:00 pm

Location: South/West Foyer

Set Up Poster: 1:00 pm to 5:00 pm

Location: Ballroom VI-VIII

Monday Morning, 1 November 1999

6:30 am Registration:

Location: South/West Foyer

7:00 am Set Up Poster Presentations:

Location: Ballroom VI-VIII

8:00 am PLENARY SESSION:

Location: Ballroom I-V

MODERATOR: DAVID RIGGS

8:00 - 8:15 Welcome

David Riggs, MBAO, Chief Executive Officer

8:15 - 8:30 Dept. of Pesticide Regulation (DPR) -

Paul Helliker, Director

8:30 - 8:45 California Dept. of Food and Agriculture (CDFA)-

William Lyons, Secretary

8:45 - 9:00 Review of 1998 MBTOC Report-

John Duniway, Preplant

9:00 - 9:15 Review of 1998 MBTOC Report-

Phil Harein, Postharvest

9:15- 9:45 Regulatory Status of Potential MeBr Alternatives

Ken Vick

9:45- 10:00 Housekeeping-

Gary L. Obenauf

10:00 am – 10:30 am

Break

Location: Ballroom VI-VIII

10:30 am – 12:00 noon

Location: Ballroom I-V

PLENARY SESSION – Economics of Methyl Bromide Ban

Moderator: John Van Sickle

10:30-10:50 Jim Epperson-USDA Sponsored Study (Gianessi)

10:50-11:10 Joe Schatzer-NAPIAP Study

11:10-11:30 Ted Batkin-UNEP-Economic Assessment Panel

11:50-12:00 noon Discussion

12:00 Noon until 1:00 pm

LUNCH BREAK

Monday Afternoon, 1 November 1999, Concurrent Sessions

Registration:

Location: South/West Foyer

<p>Preplant Session: Submitted Papers Loc: Ballroom I-IV Strawberries – 1 Moderator: Erin Rosskopf 1:00 - 1:20 Cebolla, Vicent (1)-Two Years Effect of Some Alternatives to MeBr on Strawberry Crops 1:20 - 1:40 Duniway, John (2)- Chemical and Cultural Alternatives to MeBr Fumigation of Soil for Strawberry 1:40 - 2:00 Eayre, Cynthia G. (3)-Enhanced Yield in Strawberries Without Use of MeBr 2:00 - 2:20 Gordon, Tom (4)-Management of Verticillium Wilt in Strawberry Nurseries 2:20 - 2:40 Locascio, S.J. (5)-Strawberry Production with Alternatives to MeBr Fumigation 2:40 - 3:00 Discussion of Problems with Implementation of the Alternatives</p>	<p>Postharvest Session: Submitted Papers Loc: Ballroom V Physical and Chemical Alternatives, Economics Moderator: Judy Johnson 1:00 - 1:20 Sargent, James (52) Heat Treatment: Capabilities and Limitations 1:20 - 1:40 Rodriguez-Kabana, R (53)-Insecticidal Properties of Iodinated Hydrocarbons 1:40 - 2:00 Halverson, Steven (54)-The Control of Various Species of Stored-Product Insects with EHF Energy 2:00 - 2:20 Lynch, Loretta (55)-The Economic Impacts of Banning MeBr: Where Do We Need More Research? 2:20 - 2:40 McAllister, David L. (56)-A Commercial Recapture System for MeBr at Dallas/Ft. Worth International Airport 2:40 - 3:00 Discussion of Problems with Implementation of the Alternatives</p>
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3:00 pm – 3:30 pm	Break	Location: Ballroom VI-VIII
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<p>Preplant Session: Submitted Papers Loc: Ballroom I-IV Strawberries – 2 Moderator: Christopher Winterbottom 3:30 - 3:50 Martin, Frank (6)-Strawberry Root Rot and the Recovery of <i>PYTHIUM</i> and <i>RHIZOCTONIA</i> SPP 3:50 - 4:10 Bull, Carolee T. (7)-Factors Influencing Integrated Methods for Control of Soilborne Diseases of Strawberry 4:10 - 4:30 Lopez-Aranda, J.M (8)-The Spanish National Project on Alternatives to MeBr: The Case of Strawberry 4:30 - 5:00 Discussion of Problems with Implementation of the Alternatives</p>	<p>Preplant Symposium Loc: Ballroom V Application Technologies for MeBr Alternatives Moderator: Tom Trout 3:30 - 3:35 Gilreath, Jim -Application Methods for Chemical Alternatives in Florida 3:35 - 3:40 Wilhelm, Steve -Application Methods for Chemical Alternatives-Chemical Company Perspective 3:40 - 3:45 CA. Strawberry Grower –Application Methods for Chemical Alternatives in California Strawberries 3:45 - 3:50 Odelson, Dave -Application of Biological Agents Through Drip Irrigation Systems 3:50 - 5:00 Discussion</p>
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5:00 pm – 6:30 pm 7:00 pm – 8:30 pm	POSTER SESSION: RECEPTION	Moderator: William Thomas Location: Ballroom VI-VIII LOCATION: Ballroom VI-VIII
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Tuesday Morning, 2 November 1999, Concurrent Sessions

7:00 am	Registration:	Location: South/West Foyer	
Preplant Session: Submitted Papers Loc: Ballroom IV,V Strawberries – 3 Moderator: Nancy Burelle 8:00 - 8:20 Sances, Frank (9)-Conventional and Organic Alternatives to MeBr on California Strawberries 8:20 - 8:40 Trout, Tom (10)-Strawberry Response to Fumigants Applied by Drip Irrigation Systems 8:40 - 9:00 Morgan, Alison (11)-Production of Herbicide Tolerant Strawberry Through Genetic Engineering 9:00 - 9:20 Fennimore, S.A. (12)-Weed Control in California Strawberries Without MeBr 9:20 - 10:00 Discussion of Problems with Implementation of the Alternatives		Postharvest Session: Submitted Papers Loc: Ballroom I-III Ship and Container Fumigation Moderator: Sheila Jones 8:00 - 8:20 Cavasin, Roger (57)-MeBr Alternatives-Toronto Trials 8:20 - 8:40 Fields, Paul (58)-Efficacy of Three Fumigant Methods for Empty Ship Holds Against Stored Product Insect Adults and Eggs 8:40 - 9:00 Mathews, Mark (59)-Fumigation of an Empty Shiphold using the Horn Generator/Magtoxin® Granules System 9:00 - 9:20 Weightman, Murray (60)-Recover and Recycle Using Bromosorb Technology™ 9:20 - 10:00 Discussion of Problems with Implementation of the Alternatives	
10:00 am – 10:30 am		Break	
		Location: Ballroom VI-VIII	
Preplant Session: Submitted Papers Loc: Ballroom IV,V Vegetables and Ornamentals Moderator: Frank Westerlund 10:30-10:50 Locascio, S. J. (13)-Soil Flooding and Chemical Alternatives to MeBr in Tomato Production 10:50-11:10 Roskopf, E.N. (14)-Alternative Soil Disinfestation Treatments for Weed Control 11:10-11:30 Gilreath, J.P. (15)-Efficacy of MeBr Alternatives in Tomato and Double-cropped Cucumber 11:30-11:50 Gilreath, J.P. (16)-Soil Fumigant and herbicide Combinations for Caladium 11:50-12:00 noon Discussion of Problems with Implementation of the Alternatives		Postharvest Session: Submitted Papers Loc: Ballroom I-III Fumigation Moderator: Shlomo Navarro 10:30-10:50 Brigham, Robert (61)-Corrosion of Metals in Phosphine 10:50-11:10 Navarro, Shlomo (62)-Reducing MeBr Dosage or Exposure Time Using CO ₂ With MeBr or CO ₂ With Heat 11:10-11:30 Williams, Robert (63)-Enhanced Fumigation Efficacy as a MeBr Alternative: Case Studies With Sulfuryl Fluoride 11:30-11:50 Schneider, Brian M. (64)-Sulfuryl Fluoride Research and Development Update 11:50-12:00 noon Discussion of Problems with Implementation of the Alternatives	
12:00 noon – 1:00 pm		Lunch	

Tuesday Afternoon, 2 November 1999, Concurrent Sessions

Registration:

Location: South/West Foyer

<p>Preplant Session: Submitted Papers Loc: Ballroom IV,V IPM/Economics Moderator: Tom Trout 1:00 - 1:20 Porter, Ian (17)-Will Fumigants, Biofumigants or IPM, Adequately Replace MeBr in Australia? 1:20 - 1:40 Brown, Gordon (18)-Research on Replanting Apples Without MeBr in Tasmania, Australia 1:40 - 2:00 Van Sickle, John J. (19)-Sustainable Impacts for a Seamless Transition in the U.S. Vegetable Industry 2:00 - 2:20 Ndalut, P. K. (20)-Potential MeBr Alternatives in Soil Fumigation 2:20 - 3:00 Discussion of Problems with Implementation of the Alternatives</p>	<p>Preplant Session: Submitted Papers Loc: Ballroom I-III Non-traditional Alternatives Moderator: Civerolo, Ed 1:00 - 1:20 Stapleton, J.J. (21)-Solarization Approved Against Nematode Infestation of Containerized Nursery Stock 1:20 - 1:40 Stapleton, J.J. (22)-Fumigation and/or Solarization Soil Treatment for Verticillium Wilt of Apricot 1:40 - 2:00 Haglund, William A. (23)-Metam Sodium A Potential Alternative to MeBr 2:00 - 2:20 Dickson, Don W. (24)-MeBr and Chloropicrin Effects on <i>Pasteuria Penetrans</i> 2:20 - 2:40 Rodriguez-Kabana, R (25)-Nematicidal Activities of Iodinated Hydrocarbons 2:40 - 3:00 Discussion of Problems with Implementation of the Alternatives</p>
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3:00 pm – 3:30 pm	Break	Location: Ballroom VI-VIII
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<p>Preplant Session: Submitted Papers Loc: Ballroom IV,V Non-Chemical Alternatives Moderator: Stan Barras 3:30 - 3:50 Gamliel, A. (26)-Control of Soilborne Diseases by Combined Soil and Post-Season Treatments 3:50 - 4:10 Gamliel, A. (27)-Combined Organic Amendments With Soil Heating to Control Soilborne Plant Pathogens 4:10 - 4:30 Brodie, Bill B. (28)-Using Steam to Replace MeBr in the Golden Nematode Control Program 4:30 - 5:00 Discussion of Problems with Implementation of the Alternatives</p>	<p>Preplant Session: Submitted Papers Loc: Ballroom I-III Emissions Reductions/Ozone Moderator: Tobi Jones 3:30 - 3:50 Miller, Laurence G. (29)-Bacterial Oxidation of MeBr Field Tests 3:50 - 4:10 Papiernik, Sharon K. (30)-A New Method for Estimating the Permeability of Plastic Films to Fumigant Vapors 4:10 - 4:30 Grimaud, Thomas (31)-ORGALLOY® VIF Films: Reducing Preplant Fumigant Dosages With Preserved Efficiency 4:30 - 4:50 Pryor, Alan (32)-Results of 2 Years of Field Trials Using Ozone Gas as a Soil Treatment 4:50- 5:00 Discussion of Problems with Implementation of the Alternatives</p>
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Wednesday Morning, 3 November 1999, Concurrent Sessions			
7:00 am Registration:		Location: South/West Foyer	
Preplant Session: Submitted Papers Loc: Ballroom IV,V Biocontrol/Research Moderator: Susan Lawrence 8:00 - 8:20 Noling, J.W. (33)-Propargyl Bromide, Biorationals, and Other Fumigants for Nematode Control 8:20 - 8:40 Noling, J.W. (34)-Plant Resistance and Soil Amendments in Florida Tomato and Pepper 8:40 - 9:00 Chellemi, D.O. (35)-Impact of Soil Disinfestation Practices on Plant Health 9:00 - 9:20 Lazarovits, George (36)-Nitrogen Transformation Products Eliminate Plant Pathogens in Soil 9:20 - 10:00 Discussion of Problems with Implementation of the Alternatives		Postharvest Session: Submitted Papers Loc: Ballroom I-III Methyl Bromide Alternatives Moderator: Pat Vail 8:00 - 8:20 Johnson, Judy (65)-Response of Navel Orangeworm and Indianmeal Moth Eggs to Low Temperature Storage 8:20 - 8:40 Ross, Ralph (66)-Brazil's Use of Irradiation as an Alternative Treatment and Replacement for MeBr 8:40 - 9:00 Kunstadt, Peter (67)-Radiation Disinfestation and Fumigant Replacement, A Technology Whose Time is Now 9:00 - 9:20 Simmons, Gilbert F. (68)-MAP Packing to Meet Quarantine Security Requirements for Sweet Cherries 9:20 - 10:00 Discussion of Problems with Implementation of the Alternatives	
10:00 am – 10:30 am		Break	
		Location: Ballroom VI-VIII	
Preplant Session: Submitted Papers Loc: Ballroom IV,V Biocontrol Moderator Bill Thomas 10:30-10:50 Amadioha, A.C. (37)-Control of Tomato Wilt With Solarization and MeBr <i>Trichoderma Harzianum</i> 10:50-11:10 Gromovykh T. (38)-Strains of <i>Trichoderma</i> Benefit for Biological Control Seedlings Pathogens 11:10-11:30 Gromovykh T. (39)-Use of Different Forms of <i>Trichoderma</i> as a Soil Fumigant <i>Picea obovata</i> 11:30-11:50 Minuto, A. (40)-Soil Fumigation With Allylisotiocyanate: Preliminary Results in Italy 11:50-12:00 noon Discussion of Problems with Implementation of the Alternatives		Postharvest Session: Submitted Papers Loc: Ballroom I-III Methyl Bromide Alternatives Moderator: Diana Whiting 10:30-10:50 Whiting, Diana (69)-A High-Pressure Water Jet Treatment to Remove Quarantine Pests from Harvested Apples 10:50-11:10 Denis, Stephen (70)- Exploratory Research on Freeze Treatment for Disinfestation of Dates 11:10-11:30 Griffith, Tom (71)-Propylene Oxide, A Registered Fumigant, A Proven Insecticide 11:30-11:50 Smith, Gary K. (72)-Efficacy of MeBr Alternatives Against Forest Pests Potentially Imported to US Via Chile 11:50-12:00 noon Discussion of Problems with Implementation of the Alternatives	
12:00 noon – 1:00 pm		Lunch	

Wednesday Afternoon, 3 November 1999, Concurrent Sessions			
Registration:		Location: South/West Foyer	
Preplant Session: Submitted Papers Loc: Ballroom IV,V Perennials Moderator: Sally Schneider 1:00 - 1:20 McKenry, Michael (41)-A Rejection Phenomenon Can Occur as Root Systems Move into an Alien Soil Ecosystem 1:20 - 1:40 McKenry, Michael (42)-First –Year Nematode Control and Tree Growth Using Treatments Appropriate for Buffer Zones 1:40 - 2:00 Mazzola, Mark (43)-Managing Soil Microbial Communities to Enhance Growth of Apple in Replant Soils 2:00 - 2:20 Trout, Tom (44)-Preplant Application of Fumigants to Orchards By Micro-Irrigation Systems 2:20 - 3:00 Discussion of Problems with Implementation of the Alternatives		Symposium: UNEP TIE Loc: Ballroom I-III Roundtable Session on Implementing Alternatives to Methyl Bromide in Developing Countries Moderator: Corinna Gilfillan (73)-UNEP TIE's Round Table Session 1:00 - 2:00 Castella-Lorenzo, Guillermo, UNIDO (74)-UNEP's Lessons Learned during UNIDO's Demonstration Project Implementation Fazza, S., GTZ (75)-Experiences with Disseminating MeBr Alternative Technologies to Jordanian Farmers Lopez-Silva, Juan, World Bank -Implementing Demonstration Projects in Latin America 2:00 - 3:00 Discussion on Promoting Adoption of Alternatives in Developing Countries	
3:00 pm – 3:30 pm		Break	
		Location: Ballroom VI-VIII	
Preplant Session: Submitted Papers Loc: Ballroom IV, V Government Sponsored Research Moderator: Joe Noling 3:30 - 3:50 Norton, Jack (45)-IR-4 MeBr Alternative Programs for Strawberries and Tomatoes 3:50 - 4:10 Huettel, Robin N (46)-Potential Funding from USDA-CSREES for Alternatives to MeBr 4:10 - 4:30 Miller, Melanie (47)-Policy Measures to Facilitate MeBr Phase-Out 4:30-5:00 Discussion of Problems with Implementation of the Alternatives		Postharvest Session: Submitted Papers Loc: Ballroom I-III Fumigation/Developing Countries/Granulosis Virus Moderator: Ralph Ross 3:30 - 3:50 Leesch, James G. (76)-The Use of 3 Fumigants on Walnuts to Control Diapausing Codling Moth Larvae 3:50 - 4:10 Taylor, Robert (77)-Design and Implementation of Demonstration Projects in Developing Countries 4:10 - 4:30 Miller, Melanie (78)-Assisting Developing Countries-Multilateral Fund and GTZ Approach 4:30 - 4:50 Vail, Pat (79)-Efficacy/Persistence of Indianmeal Moth Granulosis Virus Applied to Nuts 4:50 - 5:00 Discussion of Problems with Implementation of the Alternatives	

Thursday Morning, 4 November 1999, Concurrent Sessions			
7:00 am	Registration:	Location: South/West Foyer	
Preplant Session: Submitted Papers Non-Traditional Alternatives Moderator: Carolee Bull 8:00 - 8:20 Elmore, Clyde L. (48)-Enhancing Soil Solarization for Pest Control in Field-Grown Flower Crops 8:20 - 8:40 Shetty, K. G. (49)-Management of Verticillium Wilt in Strawberry Using Vegetable Crop Rotation 8:40 - 9:00 Schneider, Sally (50)-Grape Replant Disorder-Field Test of Some Potential Alternatives 9:00 - 9:20 Harris, Jeri Lyn (51)-Alternatives to MeBr Fumigation in Forest Nurseries of the Western U.S. 9:20 - 10:00 Discussion of Problems with Implementation of the Alternatives		Postharvest Symposium: Monitoring Systems for Detection, Mapping, and Trapping of Postharvest Insects, Moderators: Jim Leesch/Pat Vail 8:00 - 8:20 David Weaver -Mapping and Statistics for Precision targeting of Postharvest Pests 8:20 - 8:40 Charles Burks -Detection in Postharvest Dried Fruits and Tree Nuts: Technologies and roles in Postharvest Pest Management 8:40 - 9:00 E. Paul Wileyto -Using epidemiological methods to identify risk factors leading to commodity infestation 9:00 - 10:00 Discussion	
10:00 am – 10:30 am		Break	Location: Ballroom VI-VIII
PLENARY SESSION: 1992 – 2005 How Far Have We Come: What Needs to be Done? Moderator: Gary L. Obenauf 10:30-10:45 McKenry, Michael 10:45-11:00 Zettler, Larry 11:00-11:15 Caulkins, Peter 11:15-11:30 Dunkle, Rick 11:30-11:45 Botts, Dan 11:30-12:00 Noon - Discussion			Location: Ballroom IV-V

The End – Hope to see you next year in Orlando, Florida!

POSTER PRESENTATIONS

Titles

PREPLANT:

Becker, J. (80)-	Efficacy of Methyl Iodide and Synergy with Chloropicrin for Control of Soil –Borne Fungi
Boyette, C. (81)-	Bioherbicides as Alternatives to Methyl Bromide for Weed Control in Tomato
Browne, Greg (82)-	Phytophthora Control on Strawberry, Almond and Walnut Without Methyl Bromide
Burelle, Nancy (83)-	Evaluation of Amended Transplant Mixes for Fruit and Vegetable Production
Dwinell, L. (84)-	Contamination of <i>Pinus Radiata</i> Seeds in California by <i>Fusarium Circinatum</i>
Eger, Joseph (85)-	Telone Products As Alternatives to Methyl Bromide in Florida Crops
Fravel, Deborah (86)-	Mode of Action of Beneficial Fusaria For Biocontrol of Fusarium Wilt
Grimaud, Thomas (31)-	ORGALLOY - VIF FILMS: Reducing Preplant Fumigant Dosages with Preserved Efficiency
Horner, Ian (87)-	Alternative Soil Fumigant Trials in New Zealand Strawberry Production
Kobara, Yuso (88)-	Reducing Methyl Bromide Emissions From Fields with a Sheet Containing Titanium Dioxide
Lynch, Loretta (89)-	Impact of 1,3-D Restrictions in California After a Ban of Methyl Bromide
McKenry, Michael (90)-	Performance of AGRI-50 as a Nematicidal Root Dip
McMillan, Robert (91)-	Effect of Metam Sodium and Methyl Bromide on Root-Knot Weeds and Yield in Florida Tomatoes
Miller, Melanie (78)-	Assisting Developing Countries-Multilateral Fund and GTZ Approach
Noble, Ryan (92)-	Biofumigation as an Alternative to Methyl Bromide for Control of White Grub Larvae
Nyczepir, Andrew (93)-	Host Response of Guardian Peach Rootstock to Different Meloidogyne SPP. Isolates
Papiernik, Sharon (94)	Application of Ammonium Thiosulfate to Reduce Telone II Emissions From Soil
Papiernik, Sharon (95)	Enhanced Fumigant Activity at Higher Soil Temperature
Papiernik, Sharon (96)-	Impacts of Methyl Bromide and Its Alternatives on Soil Microbial Communities
Phillips, Neil Jr. (97)-	ENZONE® Soil Fumigant Application is Key to Success
Rimini, Riccardo (98)-	Virtually Impermeable Film for Use as Mulch and in Broadcast Fumigation
Sato, Dwight (99)-	Reducing Methyl Bromide in Preplant Soil Treatment for Ginger Root
Steckler, Richard (100)-	AGRI-50 – Results of Nationwide Field Testing

POSTHARVEST:

Arthur, Frank (101)-	Evaluation of a New Diatomaceous Earth (DE) Formulation to Control Stored Product Beetles
Aung, Louis (102)-	Lemon and Nectarine Quality/Phytotoxicity After Alternative Methyl Bromide Treatments
Burks, Charles S. (103)-	Necessary Conditions For Indianmeal Moth Development on Raisins
Follett, Peter (104)-	Accelerated Quarantine Treatment Development For Insect on Poor Hosts.
Griffith, Thomas (71)-	Propylene Oxide, A Registered Fumigant, A Proven Insecticide
Mitcham, Elizabeth (105)-	Using Microcalorimetry to Better Understand Insect Response to CA
Schneider, Sally (106)-	Quarantine Use of Methyl Bromide in the U.S. – What are the Numbers?
Shellie, Krista (107)-	Semi-Commercial Scale Ultra-Low Oxygen Storage For Disinfestation
Zettler, J. Larry (108)-	Sulfuryl Fluoride A Disinfestation Treatment For Walnuts and Almonds

MISCELLANEOUS:

Thomas, William (109)-	Update on the Methyl Bromide Phase Out
UNEP TIE Ozone Action Programme (110)-	Phasing Out Methyl Bromide in China: A Developing Country Initiative